What is claimed is:

1. A calibration device for calibrating a linear velocity and a track pitch for an optical disc drive, comprising:

a bit-clock generator for generating a bit-clock signal having a frequency higher than that of a reproduced signal according to the reproduced signal read from an optical recording medium;

a data amount counting unit for counting the pulses of the bit-clock signal for each motor frequency generator pulse to generate a data amount; and

a calculator for calculating the linear velocity and the track pitch of the optical recording medium according to the data amount and the motor frequency generator pulse.

2. The calibration device according to claim 1, further comprising a frequency divider for receiving an output pulse from a spindle motor to generate the motor frequency generator pulse according to a setting value.

3. The calibration device according to claim 1, wherein the data amount counting unit is a counter.

4. The calibration device according to claim 1, wherein the bit-clock generator comprises:

a feature extractor for determining the type of the optical recording medium according to the reproduced signal, and outputting a reference signal; and

a phase-locked loop circuit for outputting the bit-clock signal according to the reference signal.

5. The calibration device according to claim 2, wherein the bit-clock generator comprises:

a feature extractor for determining the type of the optical recording medium according to the reproduced signal, and outputting a feedback signal;

a phase-locked loop circuit for receiving the feedback signal from the feature

extractor and a constant-frequency pulse, and generating a control signal;

a control unit for controlling the rotation speeds of the spindle motor and the disc according to the control signal from the phase-locked loop circuit; and

an RF signal generator for generating the reproduced signal of the disc.

6. The calibration device according to claim 4, wherein the reproduced signal is an EFM sync signal, an ATIP signal or a wobble signal.

7. The calibration device according to claim 5, wherein the reproduced signal is an EFM sync signal, an ATIP signal or a wobble signal.

8. The calibration device according to claim 2, wherein the calculator calculates the linear velocity β according to the following equation:

$$\frac{X}{Y} \times \frac{2 \cdot \pi \cdot R}{\beta} \times C = M,$$

wherein Y represents the pulse number per revolution of the spindle motor, X is a frequency divisor of the motor frequency generator pulse, M is the data amount measured from the counter, R represents the radius of the position where an optical pick-up located on the optical recording medium, and C represents a bit-clock amount contained in the optical recording medium per unit time.

9. The calibration device according to claim 8, wherein the position of the radius R is a position of 0th minute, 2nd second and 0th block, and R=25mm.

10. The calibration device according to claim 8, wherein the calculator calculates the track pitch t according to the following eqution:

$$t = \frac{75\pi}{n\beta} \cdot \left(\left(\frac{M_2}{M_1} \right)^2 - 1 \right) \cdot R_1^{\ 2} ,$$

wherein n represents the number of data blocks passed after any K tracks are jumped, 75 represents the number of data blocks contained in one second,

R_1 represents a first radius of the optical pick-up, M_1 represents a first data amount, and M_2 represents a second data amount.

11. The calibration device according to claim 10, wherein the position of the radius R is a position of 0th minute, 2nd second and 0th block, and R=25mm.

12. A method for calibration a linear velocity and a track pitch for an optical disc drive, comprising the steps of:
initializing the optical disc drive;
determining the type of the optical recording medium;
moving a pick-up to a lead-in area;
comparing a frequency generator pulse of the motor with a reproduced signal of the optical recording medium so as to get a value of a first data amount;
calculating the linear velocity of the optical recording medium according to the value of the first data amount and a calculation equation;
calculating the number of data blocks passed after any tracks are jumped, and getting a value of a second data amount of the tracks; and
calculating the track pitch t according to the linear velocity of the optical recording medium, the value of the second data amount, and a track-jumping equation.

13. The method according to claim 12, wherein the step of initializing the optical disc drive comprises the following steps of:
moving the pick-up to the lead-in area;
activating a laser beam and focusing the laser beam;
setting a rotation control mode for the motor; and
positioning a track and reading the reproduced signal on the disc.

14. The method according to claim 12, wherein the equation for calculating the linear velocity β is:

$$\frac{X}{Y} \times \frac{2 \cdot \pi \cdot R}{\beta} \times C = M,$$

wherein Y represents the pulse number generated after the motor rotates a revolution, X is a frequency divisor of the motor frequency generator pulse , M is a value of the data amount, R represents the radius of the position where an optical pick-up located on the optical recording medium, and C represents a bit-clock amount contained in the optical recording medium per unit time.

15. The method according to claim 12, wherein the equation for calculating the track pitch is:

$$t = \frac{75\pi}{n\beta} \cdot \left(\left(\frac{M_2}{M_1} \right)^2 - 1 \right) \cdot R_1^{\,2} \ ,$$

wherein n represents the number of data blocks that are jumped, 75 represents the number of data blocks contained in one second, R_1 represents a first radius of the position of the pick-up when the pick-up starts, M_1 represents a first calculated data amount, and M_2 represents a second calculated data amount.

16. The method according to claim 15, wherein the position of the radius R is a position of 0th minute, 2nd second and 0th block, and R=25mm.

17. The method according to claim 12, wherein the reproduced signal includes an EFM sync signal, an ATIP signal or a wobble signal.